

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NORTH CAROLINA
SOUTHERN DIVISION

NO. 7:13-cv-200

CAPE FEAR RIVER WATCH, INC.,
SIERRA CLUB, AND WATERKEEPER
ALLIANCE,

Plaintiffs,

v.

DUKE ENERGY PROGRESS, INC.

Defendant.

COMPLAINT
(JURY TRIAL DEMANDED)

NATURE OF THE CASE

1. This citizen enforcement action challenges ongoing, unlawful discharges of toxic metals and other pollutants by Defendant Duke Energy Progress, Inc., at its L.V. Sutton Steam Electric Plant coal-fired electricity generating plant (“Sutton”), in violation of the Clean Water Act (“CWA”), 33 U.S.C. §§ 1251-1376.

2. Duke Energy Progress, Inc. (“DEP” or “Defendant”) is engaged in the generation, transmission, distribution, and sale of electricity. DEP, formerly known as Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc., is a North Carolina corporation with its headquarters in Raleigh, North Carolina. The Sutton facility is located north of Wilmington off Highway 421 in New Hanover County, North Carolina, adjacent to Sutton Lake and the Cape Fear River. Sutton is owned and operated by DEP.

3. By a 1971 statute and easement, the state of North Carolina authorized DEP’s predecessor Carolina Power & Light Company to impound a navigable stream, Catfish Creek, in

order to create the 1,100-acre Sutton Lake (“the Lake”). Both the statute and the easement granted by the state for the creation of the Lake require that the Lake be managed by the North Carolina Wildlife Resources Commission (“WRC”) as a public fishery.

4. Sutton Lake is a popular fishing destination. It is frequented both by sport fishermen and by subsistence fishermen, who catch fish that are eaten by themselves and their families. WRC manages the Sutton Lake fishery with financial support from federal funds and grants from the U.S. Fish and Wildlife Service’s Sport Fish Restoration Program. These entities encourage the public to fish at the Lake and recently renovated its boat ramps and fishing pier to provide greater public access.

5. The Sutton facility includes two coal ash settling lagoons, known as the Old Ash Pond Area (approximately 54 acres, constructed in 1972) and New Ash Pond (approximately 82 acres, constructed in 1984), which border Sutton Lake and discharge into it. The approximately 136-acre lagoons contain coal ash stored in a wet state. Neither of the lagoons has a synthetic liner.

6. A sinkhole opened beneath one of the berms of the New Ash Pond in 2000, and there was a partial collapse and spill from another of the New Ash Pond berms in 2010. EPA noted that some of the Old Ash Pond berms may be constructed on a foundation of coal ash, as was the case with the 2008 Kingston, TN coal ash spill. The berms of both Sutton coal ash lagoons have been given a “Significant” Hazard rating by EPA based on the potential for economic and environmental losses due to a spill.

7. In violation of the Clean Water Act, DEP treats Sutton Lake and its public fishery as a waste treatment system lagoon for discharges from its coal ash lagoons. DEP has dumped and is dumping polluted water from its coal ash lagoons directly into this public fishing lake.

These discharges include coal ash sluice water, coal pile runoff, chemical metal cleaning wastes, and other wastewater.

8. As a result, the Lake has become heavily contaminated with selenium and other pollutants. Decades of sampling reveal that selenium concentrations have increased dramatically over time, such that in recent years the selenium concentrations in the surface water reached levels that cause reproductive failure of fish and waterfowl and have far exceeded those levels in the lake sediments and in fish tissue itself.

9. WRC determined that the sediment and fish tissue concentrations of selenium represent a “High” hazard for reproductive failure of fish and waterfowl. The most recent published assessment of the fishery by WRC noted that largemouth bass in Sutton Lake were in poor condition, and that from 2008 to 2010, both the abundance and size of the largemouth bass population declined by 50 percent.

10. In a 2009 email exchange, WRC staff commented that Progress Energy had been withholding selenium data from WRC, noting that “multiple requests for updated selenium concentrations have not been responded to.” The WRC staff also suggested that Defendant’s selenium contamination could kill off the fishery entirely: “[O]nce selenium levels reach a certain point, there will no longer be fishery issues with which to be concerned.”

11. In addition, DEP has violated the terms of its NPDES permit – and thus violated the CWA – by allowing pollutants and coal ash materials to escape from its coal ash lagoons into the groundwater at Sutton. These unauthorized discharges are prohibited by the Sutton NPDES permit.

12. The plume of contaminated groundwater is migrating towards drinking water supply wells that provide drinking water to the economically disadvantaged multi-ethnic

community around Flemington Road, off Highway 421 east of the Sutton facility. These wells are referred to hereinafter as the “Flemington wells” and are marked as NHC-SW3 and NHC-SW4 on the map attached as Exhibit 1. The Flemington wells are located approximately half a mile from the Sutton coal ash lagoons.

13. A recent “Source Water Assessment Program Report” prepared by the North Carolina Division of Environmental Health, Public Water Supply Section for the water system served by the Flemington wells assigned their “Inherent Vulnerability Rating,” “Contaminant Rating,” and “Susceptibility Rating” the highest risk ratings and listed the Sutton facility numerous times as a “Potential Contaminant Source” for these wells. The report also confirms that many of the highly contaminated groundwater wells at Sutton are within the area that contributes groundwater to the Flemington wells.

14. After the Conservation Groups raised this issue in their notice letter, the state of North Carolina confirmed in a verified complaint that the Sutton groundwater contamination is upgradient of the Flemington wells, meaning the contamination flows towards the Flemington wells. Exhibit 2, ¶¶ 190-91. The state has identified this movement of groundwater as a special “Risk Factor” that threatens the Flemington wells. *Id.*

15. The Flemington community has a history of drinking water pollution problems. Its water system is supplied by these wells because its original wells in a different location were contaminated by toxic chemicals from a landfill. *See U.S. v. Waste Indus., Inc.*, 734 F.2d 159, 161-63 (4th Cir. 1984) (describing contamination of prior drinking water supply in the Flemington community). The Fourth Circuit noted that around Flemington the “surrounding soil is composed of highly permeable sand,” which allowed the contamination to leach into the groundwater and migrate to the Flemington water supply source. *Id.* at 162. The court further

noted that “the process of leaching and migration of contaminants *will continue indefinitely unless remedial action is taken*” and allowed EPA’s action for a permanent injunction to go forward. *Id.* at 163 (emphasis added).

16. The contaminated groundwater at Sutton is also flowing directly into a canal that is connected to and flows into Sutton Lake. As a result, the coal ash lagoons are discharging pollutants into Sutton Lake via this hydrologic connection, and thus constitute an additional unpermitted point source discharge in violation of the CWA.

17. Upon information and belief, DEP plans to retire its coal-fired generating operation at Sutton by the end of 2013, but has not submitted a closure plan for the ash lagoons to DENR and plans to leave the ash in place and continue using the ash lagoons to receive waste streams and discharge into Sutton Lake.

18. As long as the coal ash remains in these leaking lagoons, it will continue to discharge pollutants into Sutton Lake in violation of the CWA and will continue to place the public fishery at risk of a coal ash spill into the Lake.

JURISDICTION, NOTICE, AND VENUE

19. Cape Fear River Watch, Inc., Sierra Club, and Waterkeeper Alliance (the “Conservation Groups”) bring this enforcement action under the citizens’ suit provision of the CWA, 33 U.S.C. § 1365. This Court has jurisdiction over this action pursuant to 28 U.S.C. § 1331 and has jurisdiction over the parties.

20. In compliance with 33 U.S.C. § 1365(b)(1)(A), and 40 C.F.R. § 135.2, on June 19, 2013, the Conservation Groups gave Defendant, the Administrator of the United States Environmental Protection Agency (“EPA”), and DENR notice of the violations specified in this complaint and of the Conservation Groups’ intent to file suit after sixty days should those

violations continue. A copy of the notice letter with documentation of its receipt is attached as Exhibit 3. More than sixty days have passed since the notice was given pursuant to law and regulation, and the violations identified in the notice letter are continuing at this time and are reasonably likely to continue in the future. Currently, EPA has not commenced and is not diligently prosecuting a civil or criminal action to redress the asserted violations.

21. DENR has filed an action against DEP in the Superior Court for Wake County. *State of North Carolina v. Duke Energy Progress, Inc.*, C.A. No. 13-CVS-11032, Aug. 16, 2013 (Wake Co.) (the “DENR action”), Exhibit 2. However, in that action, DENR does not seek to enforce any of the standards or limitations raised in the Conservation Groups’ notice letter. DENR’s action does not challenge DEP’s unauthorized surface water point source discharges from the Sutton coal ash lagoons into Sutton Lake. Nor does DENR seek to require compliance with the standard and limitation contained in the NPDES permit prohibiting the entering of removed substances into waters of North Carolina and navigable waters of the United States, nor with the standard and limitation prohibiting unpermitted discharge from the Sutton lagoons via the hydrologic connection between Sutton Lake and the contaminated groundwater that flows from the lagoons.

22. In this federal action, the Conservation Groups enforce those standards or limitations, with which DENR is not seeking to require compliance in the DENR action. 33 U.S.C. § 1365 (b)(1)(B). See ¶¶ 72-92 below.

23. In the DENR action, DENR does not address Defendant’s discharges from the coal ash lagoons into Sutton Lake at all. Thus, DENR has not commenced enforcement of the Clean Water Act standard and limitation against unauthorized point source discharges to waters of the United States and of the State.

24. Instead, DENR seeks only to enforce certain state groundwater regulations.

25. However, the NPDES permit standard and limitation against allowing the entering of removed substances into the waters of North Carolina and navigable waters of the United States (the “Removed Substances” provision) is an entirely separate and different standard and limitation and permit requirement.

26. The groundwater statutes and regulations of North Carolina, which are alleged in the DENR action, govern generally the contamination of groundwater outside a “compliance boundary” 500 feet from the coal ash lagoons or at the facility’s property line. *See* 15A N.C. Admin. Code 2L .0107(a).

27. The Removed Substances provision of the NPDES permit, on the other hand, is a standard, limitation, condition, and requirement of operating a wastewater treatment facility, such as the Sutton lagoons, which Defendant is allowed to operate in accordance with the terms of the NPDES permit. The NPDES permit’s Removed Substances provision logically requires that the operator of a wastewater treatment facility must ensure that the substances it removes during the treatment process (in this instance, settling) do not enter the waters of North Carolina or the navigable waters of the United States. Otherwise, the wastewater *treatment* facility would not be a wastewater treatment facility at all, but instead would be a wastewater *transmission* facility and a wastewater *pollution* facility in and of itself, because it would simply move the removed substances from the wastewater into the waters of North Carolina or navigable waters of the United States and would thereby pollute those waters. That is exactly what DEP has done and is doing at its Sutton wastewater coal ash lagoons.

28. Further, in the DENR action, DENR does not allege that the transmission of pollutants from the Sutton lagoons to the Lake by way of the hydrologically connected

groundwater is an unpermitted discharge in violation of DEP's NPDES permit. That is an additional standard and limitation with which the Conservation Groups seek to require compliance in this action.

29. Venue is proper in this Court pursuant to 28 U.S.C. § 1391(b) and 33 U.S.C. § 1365(c)(1). The challenged discharges from the Sutton coal ash lagoons and the violations of the NPDES permit are located and are occurring in New Hanover County in the Southern Division.

The Conservation Groups and Their Members

30. Since 1993, Cape Fear River Watch has been working to protect and improve the water quality of the Lower Cape Fear River Basin through education, advocacy, and action. Cape Fear River Watch engages residents of the watershed through programs to preserve and safeguard their river.

31. The Sierra Club is a national conservation organization with over 600,000 members nationwide, including 14,500 members in North Carolina. The Sierra Club has a long history of working to protect surface water quality both nationally and locally. Preserving the health of the nation's waters has been a primary goal of the Sierra Club since its founding in 1892. The Sierra Club works in and has members in New Hanover County, North Carolina, and the Cape Fear River watershed.

32. The Waterkeeper Alliance, Inc. is a non-profit corporation founded in 1999 which serves as the umbrella organization for approximately 200 local Waterkeeper organizations (including Riverkeepers, Baykeepers, Coastkeepers, etc.). The mission of the Waterkeeper Alliance is to connect and support local Waterkeeper programs to provide a voice for waterways and communities worldwide. The Waterkeeper Alliance supports and empowers member Waterkeeper organizations to protect communities, ecosystems, and water quality; promotes the

Waterkeeper model for watershed protection worldwide; and advocates for issues common to Waterkeeper programs. The Cape Fear Riverkeeper is a member of the Waterkeeper Alliance.

33. The Conservation Groups and their members have been harmed by Defendant's unlawful discharges at Sutton. Members of the Conservation Groups recreate, fish, and operate charter fishing businesses on Sutton Lake. They fear contamination of drinking water, wildlife, and lake water by discharges from Defendant's coal ash ponds containing arsenic, selenium, and other pollutants. Defendant's discharges of coal ash contaminants from the Sutton ash lagoons are reducing the use and enjoyment by the Conservation Groups and their members of area businesses that use water from nearby water supply wells. This pollution is also reducing their use and enjoyment of the Lake and harming their small businesses. Standing affidavits from the Conservation Groups and their members are attached as Exhibit 4.

34. These injuries will not be redressed except by an order from this Court assessing civil penalties against Defendant and requiring Defendant to take immediate and substantial action to stop the flow of contaminated water and groundwater into Sutton Lake, to empty the impoundments of all coal combustion byproducts, to move its storage of coal ash away from banks of Sutton Lake, to remediate the groundwater contamination at Sutton, and to comply with the other relief sought in this action.

STATUTORY BACKGROUND

35. The objective of the CWA is to "restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). To accomplish that objective, Congress set the national goal that "the discharge of pollutants into the navigable waters be eliminated." *Id.* Accordingly, the CWA, 33 U.S.C. § 1311(a), prohibits the discharge of pollutants from a point source to waters of the United States except in compliance with, among

other conditions, a National Pollutant Discharge Elimination System (“NPDES”) permit issued pursuant to 33 U.S.C. § 1342.

36. Each violation of an NPDES permit – and each discharge of a pollutant that is not authorized by the permit – is a violation of the CWA. 33 U.S.C. §§ 1311(a); 1342(a); 1365(f).

37. The CWA defines a “point source” as “*any* discernable, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, [or] container . . . from which pollutants are or may be discharged.” 33 U.S.C. § 1362(14) (emphasis added). Under this broad definition, the discharge of pollutants from mining pits, slurry ponds, sediment basins, and mining leachate collection systems have been held to be point sources. “The term ‘point source’ has been taken beyond pipes and ditches and now includes less discrete conveyances, such as cesspools and ponds.” *N. Cal. River Watch v. City of Healdsburg*, 2004 U.S. Dist. LEXIS 1008 (N.D. Cal. Jan. 23, 2004) (citing *Cnty. Ass’n for Restoration v. Bosma Dairy*, 305 F.3d 943, 955 (9th Cir. 2002); *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 988 (E.D. Wash. 1994)), *aff’d*, 496 F.3d 993 (9th Cir. 2007). *Accord U.S. v. Earth Sciences, Inc.*, 599 F.2d 368, 374 (10th Cir. 1979) (“[W]hether from a fissure in the dirt berm or overflow of a wall, the escape of liquid from the confined system is from a point source.”); *Consolidation Coal Co. v. Costle*, 604 F.2d 239, 249-50 (4th Cir. 1979) (discharges from slurry ponds, drainage ponds, and coal refuse piles fall within CWA definition of point source), *rev’d on other grounds*, 449 U.S. 64 (1980).

38. In addition, a “point source need not be the original source of the pollutant; it need only convey the pollutant to ‘navigable waters.’” *S. Fla. Water Mgmt. Dist. v. Miccosukee Tribe of Indians*, 541 U.S. 95, 105 (2004); *accord W. Va. Highlands Conservancy, Inc. v. Huffman*, 625 F.3d 159, 168 (4th Cir. 2010) (permits are required for discharges from point

sources that “merely convey pollutants to navigable waters”). Thus, ditches and channels that convey pollutants but are themselves not the original source constitute point sources. This includes unintentional conveyance of pollutants, for example, through naturally-formed ditches, gullies, or fissures. *See Sierra Club v. Abston Constr. Co.*, 620 F.2d 41, 45 (5th Cir. 1980) (discharge from mining pits and spoil piles through naturally formed ditches caused by gravity flow at a coal mining site are point sources); *Earth Sciences*, 599 F.2d 368 (holding unintentional discharges of pollutants from a mine system designed to catch runoff from gold leaching site during periods of excess melting met the statutory definition of a point source); *O’Leary v. Moyer’s Landfill, Inc.*, 523 F. Supp. 642, 655 (E.D. Pa. 1981) (intent of the discharging entity is irrelevant).

FACTS

39. The creation, management, permitting, and use by the public of Sutton Lake all clearly demonstrate that the lake is a water of the United States that DEP has unlawfully treated as a coal ash waste treatment lagoon.

40. Sutton Lake was created by damming Catfish Creek, a navigable water of the United States. *See* 40 C.F.R. § 122.2 (definition of “Waters of the United States” at (a), (e)). The 1971 easement authorizing the creation of Sutton Lake (Exhibit 5) confirms that Catfish Creek was a navigable stream. Exhibit 5 at 1. Thus, because Sutton Lake is an “impoundment[] of waters otherwise defined as waters of the United States,” it is itself a water of the United States. 40 C.F.R. § 122.2 (“Waters of the United States” at (d)).

41. Further, when Sutton Lake was created, the State required that Sutton Lake be managed as a public fishery. When the Lake was created, an easement signed by the Governor of North Carolina provided that Sutton Lake is required to be managed as a public fishery.

Exhibit 5 at 1, 3. Defendant agreed and is required under the terms of the easement “to allow public access to the cooling water reservoir and to provide a public ramp for launching boats” and “to place the fishery management of the reservoir under the jurisdiction of the North Carolina Wildlife Resources Commission.” *Id.* at 3. WRC has pointed out that “the Commission has historically managed the lake as a public resource” and it has advocated for according the lake the protections required for a water of the state.

42. The construction of Sutton Lake was authorized by a statute passed by the North Carolina General Assembly, which also mandates that “fishery management in the reservoir be under the jurisdiction of the Wildlife Resources Commission.” Chapter 462, Session Laws of 1971.

43. Further, the State of North Carolina has acknowledged repeatedly that Sutton Lake is a water of the State and not a wastewater treatment facility. The most recent permit issued by the state to Defendant for the Sutton facility lists Sutton Lake multiple times as a Class “C” water of the State. Stormwater Permit #SW8 110201 (Aug. 2, 2012), attached as Exhibit 6, at Part I ¶¶ 6(p), 7(q). Defendant did not object to this permit and is bound by its terms. Waters of the State are defined as “any stream, river, brook, swamp, lake, sound, tidal estuary, bay, creek, reservoir, waterway, or other body or accumulation of water, whether surface or underground, public or private, or natural or artificial, that is contained in, flows through, or borders upon any portion of this state” N.C. Gen. Stat. 143-212(6). Because Sutton Lake is a water of the State, the lake cannot also be a wastewater treatment facility, whose entire purpose is to *accumulate* pollutants, the opposite of the state’s policy for its public waters. *See* N.C. Gen. Stat. § 143-211(b) (“It is the public policy of the State to maintain, protect, and enhance water quality within North Carolina.”).

44. Further, the Office of the Attorney General of the State of North Carolina has concluded that Sutton Lake is a water of the state. Email from Kathryn Jones Cooper to Linda Willis (Jan. 25, 2011) (Exhibit 7).

45. DEP has two other public lakes at electricity generating facilities in North Carolina, Lake Julian in Asheville and Harris Lake near Holly Springs. Both are man-made lakes created as cooling reservoirs for other DEP power plants, just as Sutton Lake is. And both of these lakes are classified and treated as waters of the State and the United States – just as Sutton Lake is a water of North Carolina and of the United States.

46. Moreover, the fishery at Sutton Lake is managed using federal funds as part of the U.S. Fish and Wildlife Service’s Sport Fish Restoration Program, which supports fishery projects, boating access, and aquatic education. In addition to years of fishery surveys in the lake funded with federal dollars, the boat ramps at Sutton Lake were recently restored, and a floating fishing pier installed, with grant funding from the Sport Fish Restoration Program in order to “provide the public with better fishing access to Sutton Lake.” *See* 40 C.F.R. § 122.2 (definition of “waters of the United States” at (a), (c)).

47. Thus, according to the terms of its easement and the statute authorizing the Lake, the State’s permitting of the lake, its management as a public fishery (including with federal funds), and common sense, Sutton Lake is a water of the State and a water of the United States subject to the full protections of the CWA.

48. Pursuant to its delegated authority under the CWA, 33 U.S.C. § 1342(b), DENR issued NPDES permit #NC0001422, effective January 1, 2012 (the “Sutton NPDES permit”).

49. The Sutton NPDES permit authorizes only one point source discharge to waters of the United States: the discharge from Outfall 001 into the Cape Fear River. Permit No.

NC0001422 at Part I.A.1. The Sutton NPDES permit states on its cover that it authorizes DEP to discharge wastewater from the Sutton facility *only* “to receiving waters designated as the Cape Fear River”

50. However, DEP also discharges from its coal ash lagoons into Sutton Lake. These discharges consist of ash sluice water, coal pile runoff, low volume wastes, and chemical metal cleaning waste. These discharges contain toxic pollutants including arsenic, selenium, mercury, antimony, cadmium, chromium, lead, and zinc; as well as other pollutants including sulfate, copper, ammonia, nitrogen, phosphorus, iron, manganese, total dissolved solids, and total suspended solids.

51. The Sutton NPDES permit treats the discharges of these waste streams from the coal ash lagoons into Sutton Lake as “internal outfalls” within a waste treatment system. These discharges are termed “internal” in the permit because they are considered *not* to discharge to waters of the United States. Accordingly, the Sutton NPDES contains no limits on the discharges to Sutton Lake for toxic pollutants such as selenium and arsenic. Indeed, by its own terms the permit does not protect water quality in Sutton Lake: the Fact Sheet for the permit states that several of these “internal” waste streams are “not a direct discharge [to waters of the United States] *so no parameters are water quality limited*” to protect Sutton Lake.

DENR/DWQ Fact Sheet for NPDES Permit Development, NPDES No. NC0001422, at 2 (emphasis added).

52. DEP’s discharges into Sutton Lake have had dire consequences. The selenium concentrations in Sutton Lake’s surface water, and especially in the fish tissue, fish eggs, and lake sediments, have been determined to pose a “High” hazard to the fishery because they greatly exceed – often by 10 times or more – the levels that cause reproductive failure in the fish

population. DEP's coal ash pollution is harming the population of fish available to those who depend on it for food and recreational fishing. WRC found the selenium contamination also subjects waterfowl to "High" risk of reproductive failure.

53. Fish absorb selenium through their gills or by eating contaminated food sources such as worms. Extremely high levels of selenium have been found to accumulate in fish and amphibians living in coal ash-contaminated waters and wetlands, if they survive exposure to the toxin. As confirmed by laboratory studies, selenium accumulation can cause developmental abnormalities in fish and amphibians and has led to the death of entire local fish populations. Selenium is bioaccumulative, meaning it is passed up the food chain in increasing concentrations, and excessive amounts have been found in water snakes, small mammals, birds and humans.

54. In addition to the selenium contamination in the lake, DENR's Division of Water Quality has noted that "[a]lgal blooms in the cooling reservoir (Sutton Lake) are occurring more frequently" due to un-reacted ammonia in the ash sluice water. The Sutton NPDES permit contains no limits for ammonia discharges into the lake and requires ammonia monitoring only when ash is actively sluiced into the lagoons, even though the lagoons discharge regularly into the lake – and will continue to do so indefinitely – due to storm events and other waste streams.

55. The lagoons at Sutton have received various waste streams, including coal ash that is sluiced to the lagoons in a wet form, coal ash transport water, coal pile runoff, and chemical metal cleaning wastes. These waste streams are treated by sedimentation in the ash lagoons. DEP has disposed of the settled solids and pollutants in both lagoons.

56. The pollutants, solids, and sludges from DEP's Sutton coal ash lagoons have for years been entering State waters and navigable waters. The lagoons have leached, and will

continue to leach, these substances and pollutants from the bottom and sides of both unlined lagoons into the groundwater at Sutton.

57. For years, pollutants from the coal ash have been found in groundwater under, at, and around Sutton. These substances include toxic pollutants including arsenic, selenium, mercury, antimony, cadmium, chromium, lead, and zinc; as well as other pollutants including sulfate, copper, iron, manganese, nitrate, and total dissolved solids. When the ash comes into contact with water, these metals and other pollutants tend to leach or dissolve into the water.

58. Groundwater monitoring well data from the site show the pollutants leaching from the coal ash lagoons have caused numerous pollutants to exceed their respective standards, including arsenic at 34 times the standard, manganese at 47 times the standard, iron at 27 times the standard, boron at 4 times the standard, sulfate over 3 times the standard, thallium at 3 times the standard, selenium at more than twice the standard, Total Dissolved Solids at twice the standard, chloride, antimony, and lead. In addition, the groundwater contaminated by the coal ash lagoons is acidic, with a pH as low as 4.5.

59. Groundwater assessments prepared by DEP and submitted to DENR have found that the contaminated groundwater flows through sandy soil in the direction of the Flemington wells at a rate of between 109 to 339 feet per year. In 1994, DENR's Division of Environmental Management Groundwater Section explained that the groundwater flow at the Sutton site is "substantially influenced by the pumping activities of the New Hanover Co. well field [*i.e.*, the Flemington wells]" and that "[t]hese pumping activities may result in a groundwater flow pattern that moves from the lake and ash ponds toward the well field." The state has found that the Flemington wells are at high risk of contamination from the Sutton facility.

60. Potentiometric maps of the groundwater gradients at Sutton, produced for DEP in 2011 and 2012, show that the contaminated groundwater beneath and alongside the coal ash lagoons also flows directly into the canal that runs between the power plant and the coal ash lagoons. The canal is connected to and flows into Sutton Lake. These ongoing discharges of pollutants into the lake are not authorized by DEP's NPDES permit or by any other permit.

61. Arsenic is a known carcinogen that causes multiple forms of cancer in humans. It is also a toxic pollutant, 40 C.F.R. § 401.15, and a priority pollutant, 40 C.F.R. Part 423 App'x A. Arsenic is also associated with non-cancer health effects of the skin and the nervous system. According to the Agency for Toxic Substances and Disease Registry (ATSDR), there is some evidence that in childhood, long-term exposure to arsenic may result in lower IQ scores and exposure to arsenic in the womb and early childhood may increase mortality in young adults.

62. Manganese is known to be toxic to the nervous system. Manganese concentrations greater than 50 ug/L render water unusable by discoloring the water, giving it a metallic taste, and causing black staining. Exposure to high levels can affect the nervous system; very high levels may impair brain development in children. The manganese sampled at Sutton was measured at 2,360 ug/L, or 47 times North Carolina's standard of 50 ug/L.

63. Iron can render water unusable by imparting a rusty color and a metallic taste and causing sedimentation and staining; to prevent these effects the EPA has set a secondary drinking water standard of 300 ug/L. Iron was measured at 8,050 ug/L, 27 times the standard.

64. Oral exposure to boron has led to developmental and reproductive toxicity in multiple species. Specific effects include testicular degeneration, reduced sperm count, reduced birth weight, and birth defects. Boron was measured at 2,790 ug/L, or four times the state standard of 700 ug/L.

65. High concentrations of sulfates in drinking water can cause diarrhea; the U.S. EPA has established a secondary maximum contaminant level (“MCL”) of 250 mg/L and a health-based advisory of 500 mg/L. Groundwater with sulfate concentrations above the North Carolina groundwater standard of 250 mg/L is therefore unusable and potentially unsafe. Concentrations of 814 mg/L were found at Sutton.

66. Thallium is a toxic pollutant, 40 C.F.R. § 401.15, and exposure to high levels of thallium can result in harmful health effects. Studies in rats have shown adverse developmental effects from exposure to high levels of thallium, and some adverse effects on the reproductive system after ingesting thallium for several weeks.

67. Selenium is an essential element, but it is also listed as a toxic pollutant, 40 C.F.R. § 401.15, and excess exposure can cause a chemical-specific condition known as selenosis, with symptoms that include hair and nail loss.

68. Antimony is listed as a toxic pollutant, 40 C.F.R. § 401.15, and is associated with reduced lifespan, decreased blood glucose, and altered cholesterol in rodents, and with vomiting and cardiac and respiratory effects in humans.

69. Lead is a very potent neurotoxicant that is highly damaging to the nervous system. Health effects associated with exposure to lead include, but are not limited to, neurotoxicity, developmental delays, hypertension, impaired hearing acuity, impaired hemoglobin synthesis, and male reproductive impairment. Importantly, many of lead’s health effects may occur without overt signs of toxicity. Lead is also classified by the EPA as a “probable human carcinogen.”

70. Concurrent exposure to multiple contaminants may intensify existing effects of individual contaminants, or may give rise to interactions and synergies that create new effects.

Where several coal ash contaminants share a common mechanism of toxicity or affect the same body organ or system, exposure to several contaminants concurrently produces a greater chance of increased risk to health.

CLAIMS FOR RELIEF

71. The allegations of the preceding paragraphs are incorporated by reference as if repeated and set forth herein.

I. Unauthorized Surface Discharges into Sutton Lake

72. As set forth above, Sutton Lake is a water of the State and a water of the United States subject to the full protections of the CWA.

73. Accordingly, DEP's point source discharges from its coal ash lagoons into Sutton Lake, consisting of ash sluice water, coal pile runoff, low volume wastes, and chemical metal cleaning waste from "internal outfalls" 002, 003, and 004, are not authorized under the CWA. These unauthorized discharges contain toxic pollutants including arsenic, selenium, mercury, antimony, cadmium, chromium, lead, and zinc; as well as other pollutants including sulfate, copper, ammonia, nitrogen, phosphorus, iron, manganese, total dissolved solids, and total suspended solids.

74. Because the permit does not protect water quality, and instead treats Sutton Lake as an internal component of a wastewater treatment system, it does not and cannot validly authorize DEP's highly contaminated toxic discharges to this water of the United States. Where the permitting authority "has failed to fulfill its duties under the Act by issuing NPDES permits that do not comply with the Clean Water Act and its implementing regulations," the permit is not valid. *Miccosukee Tribe of Indians of Fla. v. U.S.*, 706 F. Supp. 2d 1296, 1302 (S.D. Fla. 2010), *aff'd* 498 Fed. App'x 899 (11th Cir. 2012) (per curiam).

75. It is beyond dispute that an NPDES permit cannot deliberately fail to protect water quality by erroneously declaring a water of the United States, a water of North Carolina, and a public fishing lake to be a waste treatment facility. Such an absurd result would directly contradict the CWA's objective of restoring and maintaining the chemical, physical, and biological integrity of the Nation's waters and the NPDES permitting program's goal of eliminating discharges of pollutants into navigable waters. 33 U.S.C. § 1251(a).

76. Moreover, the Fourth Circuit has affirmed that waters of the United States remain waters of the United States even if they are impounded for waste treatment. *West Virginia Coal Ass'n v. Reilly*, 932 F.2d 964 (4th Cir. 1991), *aff'g* 728 F. Supp.1276, 1290 (S.D. W.Va. 1989) (waste treatment exception to definition of waters of the United States does not apply to treatment ponds constructed in United States waters).

77. DEP's unauthorized coal ash discharges to Sutton Lake also implicate environmental justice concerns. Minority fishermen have been observed catching fish on the dock at Sutton Lake, and the minority population in a half-mile, mile, 2 -mile and 3-mile radius of Sutton Steam Station is significantly higher than the state and county wide averages. Executive Order 12,898 specifically provides, with regard to subsistence fishing, that where an agency action may affect fish, vegetation, or wildlife, that agency action may also affect subsistence patterns of consumption and indicate the potential for disproportionately high and adverse human health or environmental effects on low-income and minority populations. Executive Order 12,898 § 4 – 401.

II. Unlawful Entering of Removed Substances into State Waters and Navigable Waters of the United States

78. DEP has violated the CWA by violating an express condition in the Sutton NPDES permit barring the pollutants from the coal ash lagoons from entering North Carolina waters and navigable waters.

79. DEP's NPDES permit, Part II.B.1, states that "[t]he Permittee must comply with all conditions of this permit. *Any permit noncompliance constitutes a violation of the CWA . . .* and is grounds for enforcement action . . ." Permit No. NC0001422 (emphasis added). 33 U.S.C. §§ 1365 (f)(6), 1342(a); 40 CFR § 122.41(a) ("Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action."); *Friends of the Earth, Inc. v. Gaston Copper Recycling Corp.*, 204 F.3d 149, 152 (4th Cir. 2000) (confirming citizens are "authorized to bring suit against any NPDES permit holder who has allegedly violated its permit.").

80. DEP has violated the provision of its NPDES permit titled "Removed Substances," which prohibits the entrance of pollutants from the coal ash lagoons into North Carolina waters or navigable waters. Part II.C.6 of the permit requires that "[s]olids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be utilized/disposed of . . . in a manner such as to *prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States* except as permitted by the Commission" (emphasis added). The Sutton lagoons receive and treat various waste streams, including coal ash transport water, coal pile runoff, and chemical metal cleaning wastes. These waste streams are treated by sedimentation in the ash lagoons, and the settled solids and pollutants are disposed of in the lagoons and are contaminating the groundwater.

81. The “Removed Substances” provision of the Sutton NPDES permit prohibits the permittee from allowing coal ash contaminants removed in the course of treatment (*i.e.*, settling) as well as coal pile runoff and other wastewaters (all of which discharge to the ash lagoons at Sutton) to enter the waters of North Carolina. Groundwater is included in the North Carolina pollution control statute’s definition of waters of the State. N.C. Gen. Stat. § 143-212(6). So is Sutton Lake.

82. This provision is a logical requirement of operating a permitted wastewater treatment facility. A wastewater treatment facility exists in order to remove substances from water before the water is discharged into the state’s and the nation’s waters. It does not serve its basic function as a wastewater treatment facility if it removes substances in the course of treatment and then discharges them otherwise into the waters of the state or the nation.

83. In this case, pollutants, solids, and sludges from DEP’s Sutton coal ash lagoons have for years been entering State waters and navigable waters. The lagoons have leached, and will continue to leach, these substances and pollutants from the bottom and sides of both lagoons into the groundwater at Sutton, as described above.

84. The settling lagoons are a wastewater treatment system; their purpose is to treat and remove solids, sludges, substances, materials, and pollutants. They are prohibited from allowing such solids, sludges, substances, materials, and pollutants to enter waters of the State and navigable waters of the United States.

85. Instead, in violation of an express provision of its permit, DEP has been and is allowing the unpermitted and uncontrolled entrance of solids, sludges, and pollutants – including arsenic, cobalt, manganese, iron, barium, boron, strontium, and zinc, as well as total dissolved solids and acidic pH levels – into the waters of the State and navigable waters of the United

States. DEP's actions are a straightforward violation of this straightforward provision of the permit.

86. Accordingly, DEP has violated its NPDES permit, and thus the Clean Water Act, by allowing and causing the entering of removed substances, including solids, sludges, substances, materials, and pollutants to State waters and navigable waters of the United States, including the groundwater of North Carolina and Sutton Lake.

87. This prohibition against the entering of removed substances and pollutants to State waters, including ground waters of the State, is enforceable through a citizen suit under the CWA. *See* 33 U.S.C. § 1370 (allowing states to adopt and enforce more stringent limitations in CWA permits than the federal government); 33 U.S.C. § 1311(b)(1)(B) (stating that more stringent state limitations in furtherance of the objective of the CWA include “those necessary to meet water quality standards”); *Nw. Env'tl. Advocates v. City of Portland*, 56 F.3d 979, 986 (9th Cir. 1995) (“The plain language of CWA § 505 authorizes citizens to enforce all permit conditions”); *Culbertson v. Coats Am.*, 913 F. Supp. 1572, 1581 (N.D. Ga. 1995) (holding that “[t]he CWA authorizes citizen suits for the enforcement of all conditions of NPDES permits”).

III. Discharges Through Close Hydrologic Flow Into Sutton Lake

88. According to recent documents prepared by DEP and submitted to DENR, the contaminated groundwater at Sutton flows directly into a canal that discharges into the Lake. These unpermitted discharges of pollutants via hydrologically connected groundwater to navigable surface waters constitute an additional violation of the CWA.

89. Unpermitted discharges of pollutants via hydrologically connected groundwater to surface waters of the United States violate the CWA. EPA has explained repeatedly that the CWA applies to such discharges. 66 Fed. Reg. 2960, 3015 (Jan. 12, 2001) (“EPA is restating

that the Agency interprets the Clean Water Act to apply to discharges of pollutants from a point source via ground water that has a direct hydrologic connection to surface water.”); 56 Fed. Reg. 64876-01, 64892 (Dec. 12, 1991) (“the Act requires NPDES permits for discharges to groundwater where there is a direct hydrological connection between groundwaters and surface waters.”); 55 Fed. Reg. 47990, 47997 (Nov. 16, 1990) (announcing stormwater runoff rules and explaining that discharges to groundwater are covered by the rule where there is a hydrologic connection between the groundwater and a nearby surface water body).

90. The CWA prohibits “any addition of any pollutant to navigable waters from any point source.” 33 U.S.C. § 1362(12)(A). “[T]he touchstone for finding a point source is the ability to identify a discrete facility from which pollutants have escaped.” *Wash. Wilderness Coal. v. Hecla Mining Co.*, 870 F. Supp. 983, 987 (E.D. Wash. 1994).

91. Because there is a direct hydrologic connection between the ash lagoons and Sutton Lake, DEP’s discharges from the lagoons via the groundwater to the canal and Lake, as well as the lagoons themselves, are point sources that violate the CWA.

92. All the violations of the CWA alleged above are continuing violations.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court:

A. Issue a declaratory judgment stating that Defendant is violating the CWA with its ongoing unauthorized discharges of selenium, arsenic, and other pollutants, and by allowing and causing the entering of such removed substances into Sutton Lake and the groundwater at Sutton in violation of Defendant’s NPDES permit and the CWA;

B. Enter appropriate preliminary and injunctive relief to ensure that Defendant:

i. Ceases the discharge of effluent from its coal ash lagoons into Sutton Lake;

- ii. Prevents the flow of contaminated groundwater to the Flemington wells;
 - iii. Prevents the flow of contaminated groundwater into Sutton Lake;
 - iv. Prevents the coal ash impoundments from allowing or causing the entering of removed substances, including solids, sludges, materials, substances, and pollutants, into groundwater and Sutton Lake;
 - v. Removes all existing coal combustion byproducts from the Old and New Ash Ponds within a reasonable amount of time and stores them in an appropriately lined industrial solid waste landfill facility away from Sutton Lake, with appropriate monitoring;
 - vi. Remediates the groundwater beneath the Sutton site resulting from its unpermitted discharges; and
 - vii. Removes from Sutton Lake the selenium and other pollutants it has illegally allowed to enter the Lake and that it has illegally discharged into the Lake.
- C. Assess civil penalties against DEP of up to \$37,500 per violation per day pursuant to 33 U.S.C. §§ 1319(d), 1365(a), and 74 Fed. Reg. 626, 627 (Jan. 7, 2009);
- D. Award Plaintiffs the costs of this action, including reasonable attorney and expert fees, as authorized by 33 U.S.C. § 1365(d); and
- E. Grant Plaintiffs such further and additional relief as the Court deems just and proper.

THE PLAINTIFFS HEREBY DEMAND A TRIAL BY JURY

This the 12th day of September, 2013.

/s/ Frank S. Holleman III
Frank S. Holleman III
N.C. Bar No. 43361
fholleman@selcnc.org
/s/ Chandra T. Taylor

Chandra T. Taylor
N.C. Bar No. 28116
ctaylor@selcnc.org
/s/ Nicholas S. Torrey
Nicholas S. Torrey
N.C. Bar No. 43382
ntorrey@selcnc.org
Southern Environmental Law Center
601 West Rosemary Street, Suite 220
Chapel Hill, NC 27516-2356
Telephone: (919) 967-1450
Facsimile: (919) 929-9421

Attorneys for Plaintiffs